

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE FULL RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL WITH STREET LIGHTING AT THE INTERSECTION OF MD 151 (NORTH POINT BOULEVARD) AND COVE ROAD/NORTH POINT ROAD IN BALTIMORE COUNTY, MARYLAND. MD 151 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX PHASE. FULL TRAFFIC-ACTUATED MODE WITH THE MD 151 APPROACHES OPERATING CONCURRENTLY AND THE COVE ROAD/NORTH POINT ROAD APPROACHES OPERATING CONCURRENTLY. EXCLUSIVE LEFT-TURN PHASING WILL BE PROVIDED FOR THE NORTHBOUND AND SOUTHBOUND MD 151 APPROACHES.

CONTROLLER REQUIREMENTS

A NEW TYPE 'S' BASE MOUNTED CABINET AND EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT WILL BE INSTALLED.

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. DAVID PEAKE
DISTRICT ENGINEER
PHONE: (410) 229-2310/2311

MRS. ERIN KUHN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 229-2381

MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 229-2361

MR. ED RODENHIZER
SUPERVISOR - SIGNAL SHOP
PHONE: (410) 787-7650

MR. MIKE STOCKER
SUPPLY OFFICE IV (SIGNAL SHOP WAREHOUSE)
PHONE: (410) 787-7696

MR. MICHAEL PASQUARIELLO
DISTRICT UTILITY ENGINEER
PHONE: (410) 229-2341

MR. AVIJIT MAJI
CHIEF - TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF - TRAFFIC OPERATIONS
PHONE: (410) 787-7630

MR. EUGEN BAILY
CHIEF - SIGN OPERATIONS SECTION
PHONE: (410) 787-7670

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA:

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9016	1	EA	[UPDATED] 4 CHANNEL DETECTOR AMPLIFIER
9104	1	EA	CONTROLLER CABINET, SIZE "S" W/CTRL, VIDEO INT. 1-8 CAM
9570	89	SF	SHEET ALUMINUM GROUND MOUNTED SIGN - 1 EACH D1-1(1) (72"x36") "Sparrows Pt", UP/DIAGONAL ARROW, UP ARROW, "1-695", RIGHT ARROW, "Baltimore" - TWO 4"x6" WOOD SUPPORTS (DRILLED) - 2 EACH D3-2(1) (VAR.X36") "Cove Road" - TWO 4"x6" WOOD SUPPORTS (DRILLED) - 3 EACH OM1-3 (18"x18") - ONE 4"x4" WOOD SUPPORT - 2 EACH R4-7 (24"x30") - ONE 4"x4" WOOD SUPPORT
9571	98	SF	SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN - 2 EACH D-3(1) (VAR.X16") "Cove RD" DUAL FACED - MAST ARM MOUNTED - 2 EACH D-3(1) (VAR.X16") "North Point BLVD" DUAL FACED - MAST ARM MOUNTED - 1 EACH M1-5(6) (30"x48") "NORTH", "151", RIGHT ARROW - POLE MOUNTED - 1 EACH M1-5(6) (48"x72") "NORTH", "151", LEFT ARROW - POLE MOUNTED - 1 EACH M1-5(6) (48"x72") "SOUTH", "151", LEFT ARROW - POLE MOUNTED - 3 EACH R6-1L (36"x12") - POLE MOUNTED - 1 EACH R6-1R (36"x12") - POLE MOUNTED

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA:

EXISTING SIGNAL CONTROLLER AND ALL ASSOCIATED EQUIPMENT IN CABINET.

EQUIPMENT LIST "B"

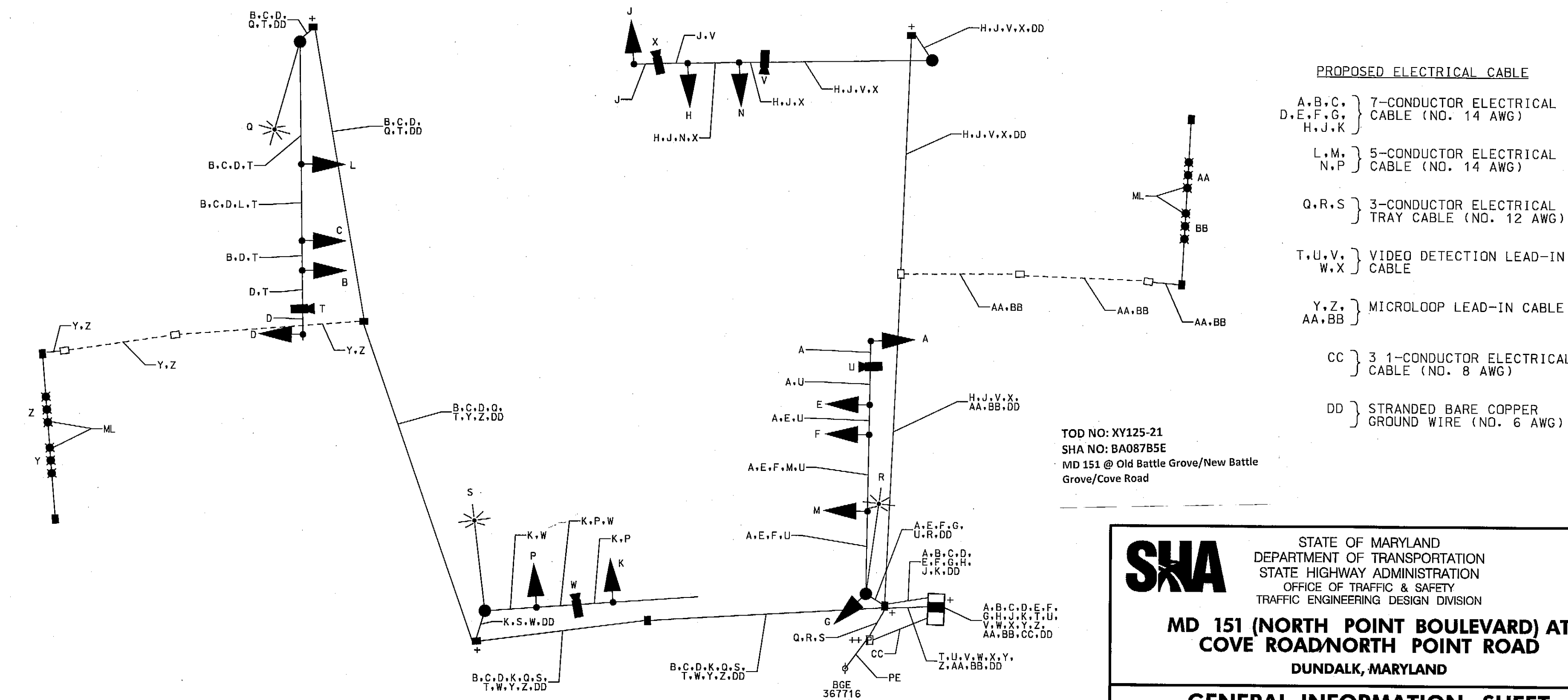
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
2002	3	CY	TEST PIT EXCAVATION
5003	150	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	300	LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5005	100	LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6001	300	LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	525	SF	5 INCH CONCRETE SIDEWALK
6003	100	SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS (TYPE 3 BRICK PAVERS)
8001	42	EA	12 INCH LED SIGNAL HEAD
8012	1	EA	EMBEDDED METERED SERVICE PEDESTAL
8014	1	EA	INSTALL CONTROLLER AND CABINET
8018	1	EA	MAST ARM POLE & 38' MAST ARM ANY 'T' DIMENSION
8020	1	EA	MAST ARM POLE & 60' MAST ARM ANY 'T' DIMENSION
8021	2	EA	MAST ARM POLE & 70' MAST ARM ANY 'T' DIMENSION
8023	4	EA	NONINVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000'
8024	1	EA	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8029	5	EA	VIDEO DETECTION CAMERA AND CABLE
8038	450	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC - BORED
8040	100	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC - TRENCHED
8041	150	LF	WOOD SIGN SUPPORTS UP TO 4' X 6'
8042	187	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8044	550	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8047	50	LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG-THHN/THWN
8048	10	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8057	100	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8058	2500	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8064	500	LF	ELECTRICAL CABLE - 3-CONDUCTOR NO. 12 AWG (B.W.G) TYPE T/C
8068	3	EA	NEG - APPROVED - FURNISH & INSTALL ANY SIZE ARM WITH LED LUMINAIRES

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)
PHASE 1 + 5	←G←	←G←	R	R	←G←	←G←	R	R	R	R	R	R	R	R
1 + 5 CHANGE	←G←	←G←	G	G	←R←	←R←	R	R	R	R	R	R	R	R
PHASE 1 + 6	←G←	←G←	G	G	←R←	←R←	R	R	R	R	R	R	R	R
1 + 6 CHANGE	←Y←	←Y←	G	G	←R←	←R←	R	R	R	R	R	R	R	R
PHASE 2 + 5	←R←	←R←	R	R	←G←	←G←	G	G	R	R	R	R	R	R
2 + 5 CHANGE	←R←	←R←	R	R	←Y←	←Y←	G	G	R	R	R	R	R	R
PHASE 2 + 6	←R←	←R←	G	G	←R←	←R←	G	G	R	R	R	R	R	R
2 + 6 CHANGE	←R←	←R←	Y	Y	←R←	←R←	Y	Y	R	R	R	R	R	R
PHASE 4 + 8	←R←	←R←	R	R	←R←	←R←	R	R	G	G	G	G	G	G
4 + 8 CHANGE	←R←	←R←	R	R	←R←	←R←	R	R	Y	Y	Y	Y	Y	Y
FLASHING OPERATION	FL/4R	FL/4R	FL/Y	FL/Y	FL/4R	FL/4R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

WIRING DIAGRAM



LEGEND

- ML - MICROLOOP PROBE
- PE - PROPOSED UNDERGROUND ELECTRICAL SERVICE
- + - 3/4 IN. X 10 FT. GROUND ROD

McCormick
Engineers & Planners
Since 1946
Taylor

509 South Exeter Street
4th Floor
Baltimore, Maryland 21202
(410) 662-7400

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

**MD 151 (NORTH POINT BOULEVARD) AT
COVE ROAD/NORTH POINT ROAD
DUNDALK, MARYLAND**

GENERAL INFORMATION SHEET

SCALE NONE DATE JANUARY 24, 2013 CONTRACT NO. XY125185

DESIGNED BY NJM COUNTY BALTIMORE

DRAWN BY NJM LOGMILE 03015104.23

CHECKED BY BSH T.I.M.S. NO. L798

F.A.P. NO. T.O.D. NO.

T.S. NO. 387E-GI SG-03 OF SG-03 SHEET NO. 03 OF 03